Section 1. Registration Information

Source Identification

Facility Name:	United Dairymen of Arizona
Parent Company #1 Name:	
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	08-Jul-2009
Postmark Date:	08-Jul-2009
Next Due Date:	08-Jul-2014
Completeness Check Date:	08-Jul-2009
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0006 0079
Other EPA Systems Facility ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	7961949
Parent Company #1 DUNS:	
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	2008 South Hardy
Street 2:	
City:	Tempe
State:	ARIZONA
ZIP:	85285
ZIP4:	
County:	MARICOPA

Facility Latitude and Longitude

Latitude (decimal):	33.405834
Longitude (decimal):	-111.952499
Lat/Long Method:	Interpolation - Map
Lat/Long Description:	Center of Facility
Horizontal Accuracy Measure:	50
Horizontal Reference Datum Name:	North American Datum of 1927
Source Map Scale Number:	24000

Owner or Operator

Operator Name:	United Dairymen of Arizona
Operator Phone:	(480) 966-7211

Mailing Address

Operator Street 1:	2008 South Hardy
Operator Street 2:	
Operator City:	Tempe
Operator State:	ARIZONA
Operator ZIP:	85285
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Mike Billotte
RMP Title of Person or Position:	Vice President of Operations
RMP E-mail Address:	mbillotte@udaz.org

Emergency Contact

Emergency Contact Name:	Mike Billotte
Emergency Contact Title:	Vice President of Operations
Emergency Contact Phone:	(480) 966-7211
Emergency Contact 24-Hour Phone:	(480) 966-7211
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	mbillotte@udaz.org

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	
Facility or Parent Company WWW Homepage Address:	

Local Emergency Planning Committee

LEPC:	Maricopa County LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	260
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	
Air Operating Permit ID:	

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	01-Jun-2009
Last Safety Inspection Performed By an External Agency:	Fire Department

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:	Hal D Rosen, CHMM
Preparer Phone:	(480) 784-4621
Preparer Street 1:	1979 e Broadway Road
Preparer Street 2:	
Preparer City:	Tempe
Preparer State:	ARIZONA
Preparer ZIP:	85282
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000010883
Description:	Ammonia refrigeration
Process Chemical ID:	1000012402
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	20000
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000010883
Process NAICS ID:	1000011264
Program Level:	Program Level 3 process
NAICS Code:	311511
NAICS Description:	Fluid Milk Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000009186

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.5
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000010079

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	
Other Type:	

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

Ammonia refrigeration system

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000010289
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7
Prevention Program Level 3 ID:	1000008873
NAICS Code:	311511

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	23-Feb-2009

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	23-Feb-2009

The Technique Used

What If:	Yes
Checklist:	
What If/Checklist:	
HAZOP:	
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	23-Feb-2010

Major Hazards Identified

Toxic Release:	Yes
Fire:	
Explosion:	
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	
Floods (Flood Plain):	

Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	Yes
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	
Dikes:	
Fire Walls:	
Blast Walls:	
Deluge System:	
Water Curtain:	
Enclosure:	
Neutralization:	
None:	Yes
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	
Perimeter Monitors:	
None:	Yes
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	Yes
Change Process Parameters:	Yes
Installation of Process Controls:	Yes
Installation of Process Detection Systems:	

Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	piping changes, expansion, new controls with new sensors

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	24-Jun-2009

Training

Training Revision Date (The date of the most recent review or revision of training programs):	24-Jun-2009

The Type of Training Provided

Classroom:	Yes
On the Job:	Yes
Other Training:	RETA

The Type of Competency Testing Used

Written Tests:	Yes
Oral Tests:	
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	RETA testing

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	24-Jun-2009
Equipment Inspection Date (The date of the most recent equipment inspection or test):	29-Jun-2009
Equipment Tested (Equipment most recently inspected or tested):	Compressor 10

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	01-Feb-2009
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	24-Jun-2009

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	01-Apr-2009

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	24-Jun-2009
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	24-Jun-2010

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	26-Jul-2003
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	26-Jul-2003

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	01-Jan-2009

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	24-Jun-2009

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	24-Jun-2009
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	01-May-2009

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	Yes
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	Yes
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	Yes
Healthcare (Does facility's ER plan include information on emergency health care?):	Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	30-Jan-2009

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	30-Jan-2009

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	City of Tempe Fire Dept.
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(480) 858-7200

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	
Clean Water Regulations at 40 CFR 112:	
RCRA Regulations at CFR 264, 265, and 279.52:	
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

EXECUTIVE SUMMARY

Accidental Release Prevention and Emergency Response Policies

United Dairymen of Arizona (United Dairymen) utilizes anhydrous ammonia in the refrigeration system at their milk processing plant in Tempe, Arizona. It is United DairymenÂ¿s policy to comply with all applicable governmental regulations.

Additionally, an emergency action plan has been prepared for United Dairymen and a chain of command to respond to emergencies has been established.

Description of the Stationary Source and Regulated Substances

United Dairymen owns and operates a fluid milk processing facility located at 2008 South Hardy Drive in Tempe, Arizona. Anhydrous ammonia is utilized as the refrigerant in the refrigeration system that supplies process cooling for the fluid milk plant.

The ammonia-based refrigeration system at United Dairymen provides direct cooling for the falling film water chillers, cream silos, an instrument air dryer, and the glycol and water chillers. The largest vessel in the refrigeration system at United Dairymen is the high pressure receiver.

During normal operations, the anhydrous ammonia is distributed throughout each refrigeration system. However, during major maintenance activities on either system, the system being worked on can be Â¿pumped downÂ¿ to evacuate the ammonia from the system and stored the ammonia as a liquid in the receiver. The maximum quantity of ammonia that can be stored in the high pressure receiver is 20,000 pounds.

For purposes of the offsite consequence analyses, the RMP regulations define the toxic endpoint for anhydrous ammonia as 0.14 mg/l (200 ppm).

General Accidental Release Prevention Program and Chemical-Specific Prevention Steps

A PSM program, which meets the requirements of the general accidental release prevention program, has been developed at United Dairymen to address the anhydrous ammonia system. The PSM program includes the following chemical-specific prevention steps:

Â¿ Written process safety information, including information pertaining to the hazards of ammonia, the technology of the process, and the equipment in the process has been compiled.

Â¿ Initial Process Hazard Analyses (PHAs) were performed and will be updated and revalidated at least every five years.

Â¿ Written operating procedures have been developed and implemented, and will be reviewed at least annually.

Â¿ Safe work practices, such as lockout/tagout, confined space entry, opening process equipment or piping, and control over entrance into the facility have been developed and implemented.

Â¿ Each employee involved in operating the ammonia system has received initial training and refresher training at least every three years.

Â¿ Written mechanical integrity procedures have been established and implemented.

Â¿ A Management of Change (MOC) program has been developed and implemented to address all proposed changes to the ammonia system.

Â¿ Pre-startup safety reviews will be performed when a modification is made to the ammonia system that is significant enough to

require a change in the process safety information.

Â¿ Audits will be conducted at least every three years to evaluate compliance with the RMP regulations.

Â¿ Incident investigation procedures have been established.

Â¿ A written plan of action regarding the implementation of employee participation has been developed and implemented.

Â¿ Hot work permits are issued for all hot work operations conducted on or near the ammonia system.

Â¿ A Contractor Safety Policy has been developed and implemented.

To ensure that the general accidental release prevention program and the chemical-specific prevention steps are implemented, United Dairymen has assigned overall responsibility for the RMP elements to the Vice President of Operations. The Vice President of Operations has the overall responsibility for the development, implementation, and integration of the RMP elements.

Five-Year Accident History

United Dairymen has not had any accidental releases from the ammonia-based refrigeration system that have resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage in the last five years.

Emergency Response Program

United Dairymen has established an emergency action plan and a chain of command to respond to emergencies and to notify emergency responders when there is a need for a response. However, an emergency response program does not need to be developed for the facility since United Dairymen employees will not respond to accidental releases of ammonia, the facility is included in the community emergency response plan, and appropriate mechanisms are in place to notify emergency responders.

Planned Changes To Improve Safety

Through the accidental release prevention program, United Dairymen regularly evaluates the need for any changes to improve safety. The recent upgrades and expansion of the refrigeration system inherently improved the safety of the system through the replacement of old equipment with new equipment and upgrades to the control system. No other changes to improve safety are currently planned for the refrigeration system.